Wool and Woollen Manufactures of Khorassan. By Capt. HUTTON, 37th Regiment, N. I.

GOAT'S WOOL, OR DOWN.

The goats of the hilly tracts of Khorassan yield, like those of Cashmere and Thibet, a fine and remarkably soft down, growing at the roots of the outer or true hair.

The colour of this wool is generally of a shade of brown more or less intense, and the outer or hairy coating of the animal is long, and usually jet black. The *white down*, is scarce.

These goats are rather short legged, very shaggy, and very generally horned; they are rather small, and very graceful looking animals.

The best are said to be among the Hazarree and Tymunnee tribes.

These goats produce two fleeces during the year; the first during winter, which is gathered in spring, and the latter during summer, which is gathered in autumn. The latter is said to be in most esteem, and the finest. The reason given is, that in winter the severity of the season checks the natural exudations from the pores of the skin, and keeps it dry, and that consequently the hair receives less nourishment than in summer, and is therefore coarser and less soft.

The heat of the summer months, on the other hand, causing a plentiful discharge of moisture from the pores of the body, furnishes abundant nourishment to the roots of the hair, which becomes in consequence, soft and silky.

The winter fleece is therefore sheared off with the hair, and after undergoing a partial cleansing from hair and animal matter is made into "Koork-i-Puttoo," which comes chiefly from Beerjund, in Persia.

The long hair after separation from the wool is made into grainbags, tents, and ropes.

The autumn fleece is only taken from dead animals. The goat is killed for butcher's meat, and the skin well rubbed over with a solution of lime and potash, and left thus for two or three days, until incipient decay has taken place in the skin, and the hair is easily pulled out; leaving the under wool, or down, free, which is then also taken off separately.

This method appears in all respects to be the same as that practised in Koordistan, as related by Captain Conolly; but the lime with which the skin is rubbed over does not here injure the wool. It is first pulled out of its natural masses by the hand, and afterwards farther sepa-

rated and cleaned in the same manner as cotton, and then spun into threads.

The autumn wool is gathered from the skins of animals which have been slaughtered for food, and it is dearer than the winter fleece, on account of its superior fineness.

In Captain Conolly's Book of Samples, I observed a dark brown wool, labelled, "Thibetan Shawl Wool." I may mention, that during a trip through some of the Tartar districts of the Himalah, where the Shawl Goats abound, I scarcely remember to have seen one dark coloured animal, the prevailing colour being white, with sometimes black ears and head; the wool, or "Pushm," as it is there called, being consequently quite white also. The wool in Captain Conolly's book appeared to me to be the same as that of Khorassan. I mention this, in case he should have sent you specimens.

No. 1. Is a sample of the wool of the prevailing colour, and procured from black goats at Candahar; it is the winter growth.

No. 2. Is another shade. Both are characteristic.

No. 3. Is a woollen cloth manufactured at Beerjund, in Persia, from the winter fleece, and is interspersed with the hairs, which are only, as above mentioned, partially separated from the wool after shearing.

This sample is called "Barak-Koork-i;" it is made in pieces of from 9 to 12 inches broad, by 8 to 12 yards long, at from 4 to 10 Company's rupees per piece.

No. 4. Is another sample of a similar, though lighter coloured cloth, from the same place, and of the same kind of wool.

The price in Beerjund is 5 rupees per piece of 7 yards, which as the yard there is 42 inches, and the rupee equal only to 8 annas, makes its price in Company's rupees to be 2-8 per 8 yards and 6 inches. The rupee in use at Beerjund is "Adam-Khan-i."

In Candahar the same quantity sold for 8 rupees, each equal to 12 annas, so that the cost from Beerjund was increased $3\frac{1}{2}$ Company's rupees. This was owing to the endless duties levied on the road; and Kohundil Khan* exacted a farther tax of $\frac{1}{40}$ on its arrival.

This cloth is also exported to Cabul, Scindh, Shikarpore, and other places. At present the greatest quantity goes to Tehran; and in Candahar and other Afghan towns the demand is far greater than the supply.

* Note.—One of the three brothers of Dost Mahummud Khan who held Candahar after the usurpation as a separate government. The taxes on trade and manufactures levied by these chiefs were most oppressive.

No. 5. Is a finer kind, made of lighter coloured wool. The sizes the same.

No. 6. Is called "Puttoo Koork-i," it is from Herat, Beerjund, and Seistan. The best however is produced in Cabul. The foreign duty on this is $\frac{1}{40}$,* but in Kohundil Khan's time it amounted to $\frac{1}{7}$ besides the various taxes on the road. It is in most demand among Hindoos. It is washed after being woven, to swell the threads and give it a thick and soft feel.

The size is 4 to 5 yards long, by $\frac{1}{2}$ to $\frac{3}{4}$ yard wide, at 12 Co's. Rupees per piece.

No. 7. This is the commonest colour, and the wool abundant. It is made at Candahar, Cabul, and Herat. It is also called "Puttoo Koork-i;" each puttoo is made of two pieces, stitched longitudinally together, of the following sizes—

Largest size, 3 ft. $10\frac{1}{2}$ ins. wide, by 4 yds. 2 ft. $6\frac{1}{2}$ in. long.

Smallest size, 3 ft. 10 ins. wide, by 4 yds. 2 ft. long.

A puttoo consequently, of the largest size, is 2 yards 1 foot $9\frac{1}{4}$ inches wide, by 4 yards 2 feet $6\frac{1}{2}$ ins. long.

One of the second size, is 2 yards 1 foot 8 inches wide, by 4 yards 2 feet in length.

These are the outside sizes.

The price of the first size was formerly $13\frac{1}{2}$ Co's. Rupees, or 18 Candaharees, now it sells for 24 Candaharees.

The price of the second size was formerly 12 Candaharees, but is now up to 14 to 17 Candaharee rupees.†

No. 8. "Puttoo Koorh-i." This wool is scarce, and is collected from all districts, Cabul, Herat, Beerjund, &c. There is difficulty in procuring it, as the goats are usually dark coloured. The cloth manufactured in Cabul is reckoned the best, and that from Herat the worst. The cloth made at Candahar, during the sway of the Sirdars (of which the accompanying No. 8 is a specimen) sold at 10 Candahar rupees per puttoo, or shawl of 2 yards 2 feet 9 inches wide, by 4 yards 2 feet $5\frac{1}{2}$ inches in length.

All puttoos vary from $\frac{1}{2}$ to $\frac{3}{4}$ yard wide by 4 to 10 yards long. No. 8 is an article of export to Scindh and Khilat.

* N.B.—The duties now levied on all merchandise are thus:—Foreign $\frac{1}{40}$, Home made $\frac{1}{100}$, transit duty in or out, on all goods Home or Foreign $\frac{1}{300}$

† N.B. Candahar rupee, or 12 annas, Company's.

Few pieces are made, however, on account of the scarcity of white wool, and also because from its soon showing the dirt, the demand was very limited. It was chiefly taken by Hindoos.

No. 9. Is from Herat and the Herat Hazarrees; it is made in pieces of $\frac{1}{2}$ yard wide by 7 to 9 yards long, varying in price from 10 to 100 rupees according to its thickness; the thicker it is, the dearer.

It is not exported for trade, but travellers who can afford it, purchase pieces at the places where it is manufactured.

No. 10. "Nummud-Koork-i." This is a felt, and is made at Candahar and among the Tymunnees; it is made to order of all sizes, and sells at 4 rupees for one yard square.

Felts are made in a very simple manner: a mat of rushes is laid open on the ground, and the wool spread over it; the mat is then tightly folded up, and well rolled backwards and forwards, by men pressing heavily upon it, by which means the wool becomes so completely matted, that it is almost impossible to unravel it again.

This kind of Nummud is used as an article of dress; but those which are used as rugs are made from the sheep's wool, and are much coarser and thicker.

No. 11. "Puttoo Koork-i." This comes from Bokhara, and is made in pieces of about 10 to 12 yards long and 16 to 17 inches wide. In the Sirdars' time it sold from 12 to 15 Candahar rupees (12 annas) per piece, according to its fineness; at present the price is from 14 to 16 Company's rupees.

No. 12. Is a sample of wool taken from a cross between the tame and wild goat of Khorassan. Of the latter a drawing and description will be forwarded hereafter. This is sent merely as a curiosity.

No. 13. Is a sample of thread spun by the reel, or hand-wheel. There are finer than these.

No. 14. Is thread spun by the hand.

N. B.—The Tymunnee woollen fabrices are,

i. "Barak Shotur-i," made of young dromedary wool.

ii. "Barak Barai," made of goat's wool.

iii. " Barak Barai," made of lamb's wool.

iv. Tents, grain bags, ropes, and nummuds, of goat's hair and sheep's wool.

SHEEP'S WOOL.—CANDAHAR.

1840.7

There are two varieties of sheep in this part of Khorassan, both possessing the broad fat tail. Of these the Tymunnee breed is the finest, and the tail often so uncommonly cumbrous as to impede the animal's movements; in such cases a small cart or support on wheels is placed beneath it, so as to relieve the sheep from the weight, and enable it to walk about. An amusing anecdote, serving to show the ignorant credulity of the people, is told of the method sometimes adopted for increasing the size of these tails. Fresh cold water is poured over the tail every morning, and when thoroughly drenched, it is well patted and rubbed all over by the hand.

The reason given for this treatment is, "that the water softens the shin, and renders it, as it were, malleable, and consequently the patting and rubbing stretches it, so as to give room for the tail to grow"!!

The people inhabiting the hill districts, where the pasture is generally better than that of the plains, possess large flocks, and derive their chief support from the sale of wool, woollen stuffs, croot (or dried curds) and ghee.

These sheep, like the goats already mentioned, yield two fleeces during the year—the winter and summer growth. That of the winter is said to be the worst, on account of the dirt and smoke which it collects while the sheep are folded, which is in woollen tents. It is, however, the longest, and is made into carpets, grain-bags, and other coarse articles. That of autumn is finer, and made into cloaks (kosahs) and nummuds.

The wool is not exported, but is manufactured in the districts where it is produced.

In the shearing time the sheep are well washed, and when dried by the sun, are clipped with large shears. The wool undergoes no farther cleaning. The woollens manufactured at Candahar from sheep's wool are made of the fleece, which is procured from the skins of slaughtered animals. If the skins possess merely the short wool, which is the remains of the spring fleece, they are sold by the butchers to the "posteen*" makers at from one to two annas each; but if the animal is slaughtered in autumn, and possesses the summer fleece, the wool is taken off, and brings two to four annas, while the skin is sold separately to the tanners.

^{*} Note.—A sort of winter garment of sheep skin with the wool on, universally worn in cold weather.

No. 1. Is a sample of wool of the winter growth from a Candahar Ram. The quantity yielded was rather better than $3\frac{1}{4}$ lbs. English. This is reckoned good.

No. 2. From a Ewe yielding a fleece of $2\frac{1}{4}$ lbs.

No. 3. From a Ewe yielding a fleece of $2\frac{3}{4}$ lbs.

No. 4. From a Lamb, two months old.

No. 5. "Shalakee." This is the manufacture of Candahar, and is finer than that of the districts, on account of the threads being spun by the wheel instead of the twirling stone. It is made in pieces of 25 inches by 5 to 10 yards long, Candahar measures, i. e. from 5 yards 2 feet 6 inches to 11 yards 2 feet, English measure, long.

The price formerly was to $2\frac{1}{4}$ Co's. Rs. per piece, but now it is to 6 Co's. Rs. It is worn as shawls or chuddurs.

- No. 6. "Bārāk." Made from Hazarree wool, and manufactured in the Hazarree country, where it is called "Bārāk-i-Sirkullee;" the size is 15 inches wide by 7 yards long, and the price 3 Co's. Rs. It is subject to a duty of 2 annas per piece. Used as chogahs or cloaks.
- No. 7. "Bārāk-i-Bārai." This is made from Lamb's wool by the Candahar Hazarrees; the size 15 inches wide by 7 yards long, price per piece 3-12 Co's. Rs.
- No. 8. "Bārāk-i-Bārai" of Cabul. It is made also of Lamb's wool by the Cabul Hazarrees, in pieces 6 to 7 yards long, and sells at from 5 to 10 Co's. Rs. per piece.
- No. 9. "Barak-i-Barai." The manufacture of Ghuzni Hazarrees from Lamb's wool, size from 28 to 30 inches wide by 7 to 8 yards long, price from 2 to 5 Rs.

Besides these manufactures, there are carpets, grain bags, saddle bags, nummuds or rugs, felt cloaks, called kosahs, peculiar to Candahar, mittens, socks, and horse cloths.

No. 10. Is a sample of the nummud, or felt, of which the "kosahs" are made.

No. 11. Is from Herat, and is very similar to what the Tartars of Hungrung and Spiti call "Birmore," but it is thinner; 16 to 18 inches wide by 6 to 7 yards long; price from 3 to 6 Co's. Rs.

No. 12. Is a sample of wool taken from the wild sheep of Khorassan, and is added merely as a curiosity.

Along with the foregoing samples, I have the pleasure to send

two specimens of the woollens manufactured in Kunawar and Tartary, to which I beg especially to call attention, as they are made from wool, which I am informed was rejected in the English markets.

1840.]

For remarks on the wool, sheep, and mode of trading with the Tartars, I must beg to refer to my Journal of a trip to Spiti.

No. 1. Is a sample of what the hill people call "Sooklaut." It is made in Kunawur, at the towns of Soongnum and Kanum, near the head of the district, from wool of the Thibetan sheep. It is said to be finest at Kanum. In Soongnum the chief manufacture is blankets.

No. 2. Is a sample of a cloth manufactured by the Tartars of Spiti, chiefly for home consumption, from similar wool to the last.

These woollens are very generally worn in the higher hilly districts, and are called "birmoree."

The cloth is made in pieces of about 18 inches broad, and varying in length from 6 to 12 yards; the pieces are generally sold in pairs, at 5 to 7 rupees, according to the quality and size. This sample is reckoned good, and is taken off a piece of 12 yards. At Simla a pair of these would sell (if procurable at all) from 14 to 20 rupees. Both these are characteristic of the manufactures of Kunawar and Tartary. They are good samples of what these rude people can produce from that very wool which was pronounced bad, and rejected in England some years ago, and to which allusion is made in my journey to Spiti.

If such creditable woollens can be manufactured from Thibetan wool, by a *semi-barbarous people*, and by the *rudest machinery*, what might not be expected from the finished looms of Europe?

Nothing can show more clearly that mismanagement must have existed, than the quality of these very woollens prepared from the wool which at home was pronounced unservicable!

It must be borne in mind to, that these are made from unpicked wool, and that the wool itself is quite *uncultivated*, no attention being paid to the quality of the fleece of those males and females which are used for breeding. Were attention paid to this point—and it probably would be were there a demand for the article—the fleece of the Choomoorte, or Thibetan sheep, would soon bid fair to rival, if not excel, the finest products of Europe.

By a few judicious crosses with English rams or ewes, the breed might be made to undergo the dampness of a lower climate, and eventually become acclimated in England, and the wool of both be perhaps materially improved.

Candahar, 27th April, 1840.

N. B. Should leisure occur, I intend shortly to draw up a note on the culture of silk at Candahar, which I shall do myself the honor of forwarding.

Proceedings of the Asiatic Society.

(Wednesday Evening, 10th June, 1840.)

The Honorable Sir E. RYAN, President in the chair.

The Proceedings of the last Meeting were read and confirmed.

Lieutenant Arthur Broome, Deputy Secretary Military Board, was proposed by the Officiating Secretary, seconded by Professor W. B. O'SHAUGHNESSY.

Major R. Birch, Deputy Secretary to Government, Military Department, was proposed by the President, seconded by the Officiating Secretary.

Read a letter from J. ALEXANDER, Esq. Officiating Government Agent, forwarding the Account Current of the Society's funds remaining in his hand on the 30th April last, exhibiting in favor of the Society, Government securities to the amount of Sa. Rs. 10,000, and cash 742-7-1.

The Officiating Secretary apprised the Meeting, that he has transmitted three Tibetan Manuscripts to Major F. Jenkins, for the use of his interpreter Mr. Kellner, in prosecuting his studies in that language, as ordered by the Committee of Papers.

Library.

Read a letter from F. J. HALLIDAY, Esq. Junior Secretary to the Government of India, Revenue Department, forwarding for deposit a copy of Nos. 15 and 16 of Dr. Wight's Icones Plantarum Indiæ Orientalis, or Figures of Indian Plants.

Read a letter from H. V. BAYLEY, Esq. Assistant Secretary to the Government of India, forwarding for deposit, a copy of the work entitled, "Chapters of the Modern History of British India," received from the Hon'ble the Court of Directors.

Read a letter from T. C. JARDINE, Esq. Assistant Surgeon, 2nd Light Cavalry, forwarding for presentation a copy of his publication, entitled, "Catalogue of the Birds of the Peninsula of India," and offering to lend his aid in promoting the laudable objects of the Society.

The following books were presented:

Malcolmson's Clinical Remarks on some cases of Liver abscess, presenting externally.—By the author.

History of British Birds, by Mr. Yarrel-Purchased.

Naturalist's Library; Mammalia, vol. 9. Dogs.